

WHAT IS CLAIMED IS:

1. A method comprising:
 - (a) locating a feature of or relating to a heart with a probe which is inside a body; and
 - 5 (b) registering a representation of the probe with an image of the heart using the feature.
2. The method of claim 1, further comprising repeating steps (a) and (b) for at least three features of or relating to the heart.
3. The method of claim 1, wherein step (a) comprises contacting the
10 probe with the feature.
4. The method of claim 1, wherein the feature is located on an interior surface of the heart.
5. The method of claim 1, wherein the image is acquired using computed tomography, magnetic resonance, and/or ultrasound.
- 15 6. The method of claim 1, wherein the feature comprises a cardiac valve, cardiac appendage, and/or scar tissue.
7. A method comprising:
 - acquiring at least a three dimensional image of an organ or structure inside a body;
 - 20 registering a representation of a probe which is inside the body with the image using at least one feature of the organ or structure.
8. The method of claim 7, further comprising locating the at least one feature with the probe.
9. The method of claim 8, wherein the locating step comprises locating at
25 least three features with the probe, and wherein the registering step comprises using the three features to register the representation of the probe with the image.

10. The method of claim 7, wherein the image comprises one or more images acquired using computed tomography, magnetic resonance, and/or ultrasound.

11. The method of claim 7, further comprising simultaneously displaying the registered image, the registered representation of the probe, and a map of the electrical properties of the organ or structure inside the body.

12. A system comprising:

a processor configured to be communicatively coupled to a probe, the probe being configured to locate a feature pertaining to an organ or structure inside a body;

memory configured to store an image pertaining to the organ or structure inside the body, the image including the feature; and

a display configured to simultaneously display the image and a representation of the probe, the image being registered with the representation of the probe using the feature.

13. The system of claim 12, wherein the organ or structure comprises a heart and the display is configured to simultaneously display a map of electrical properties of the heart in conjunction with the image and the representation of the probe.

14. The system of claim 12, wherein the image is at least a three dimensional image.

15. The system of claim 12, wherein the organ or structure comprises a heart.

16. The system of claim 12, wherein the image comprises one or more images acquired using computed tomography, magnetic resonance, and/or ultrasound.

17. A system comprising;

a display configured to display an image of a heart and a representation of a probe which is in or adjacent to the heart;

wherein the representation of the probe is registered with the image on the display using at least one feature of the heart.

18. The system of claim 17, wherein the display is configured to display a map of electrical properties of the heart in conjunction with the image and the
5 representation of the probe.

19. The system of claim 17, wherein the display is configured to display electrical properties of the heart corresponding to at least one location of the probe in conjunction with the image and the representation of the probe.

20. The system of claim 17, wherein the image is at least a three
10 dimensional image.

21. The system of claim 17, wherein the image comprises one or more images acquired using computed tomography, magnetic resonance, and/or ultrasound.

22. The system of claim 17, wherein the probe is configured to sense electrical properties of the heart.

23. The system of claim 17, wherein the system is configured to receive
15 user input in the form of commands identifying the feature in the image.

24. The system of claim 17, wherein the system is an electrophysiology monitoring system.